

Great and Little Saleve, in the immediate vicinity of that city. They present their steep escarpments of limestone to the valley of the Rhone, but slope down on the south side to the valley of the Arve. On this southern side may be seen, not the remains of an ancient temple or city, but the magnificent ruins of mighty mountains and the monuments of an overwhelming catastrophe, which transported these ruins into their present situation. The snow-clad mountains from which they were torn rise magnificently to the view, though fifty miles distant. On the Little Saleve, at the height of fourteen hundred feet above the valley, are scattered numerous blocks of granite of vast size, not at all water-worn, and almost as fresh as if recently torn from their parent mountains; they are of that kind of granite called Protogene, in which talc or chlorite is one of the component parts, and are identical with the granite of Mont Blanc, while the Saleve on which they lie, and the surrounding mountains are calcareous. On the Great Saleve adjoining, there is one block of this granite seven feet in length, and at the height of 2500 feet above the valley. Saussure has remarked, that these blocks are not broken or shattered as they would have been, had they been hurled with violence from the Alps; neither do the limestone strata beneath them present any appearance of having been fractured or indented by their fall: on the contrary the blocks lie upon the surface. Two of these blocks of granite rest upon pedestals of limestone, a few feet above the general level of the ground. The blocks have evidently protected the limestone beneath them from disintegration, and thus would serve as chronometers, to indicate the period when they were deposited, could we ascertain the thickness of surface worn away in a given time.

I observed a few of the blocks were cracked, but this was, in all probability, effected by the percolation of water, and its expansion by frost. Another circumstance pointed out by Saussure is, that these blocks, in their passage from the Alps, appear to have taken the course of the present valleys, and where they have been carried as far as the Jura chain, they rest at various heights on the sides of that range of mountains, exactly opposite to the mouths of the Alpine valleys. Saussure, however, supposes, and with much probability, that the whole of the valley of Geneva, and the valleys that run from the Alps, and all the lower mountains of Savoy, were covered by the sea at the period when the great catastrophe took place, and that the rocks were torn off, and transported by a sudden rush of waters. He further supposes, that the specific gravity of the blocks being diminished by the medium in which they were borne along, they might be carried to a great distance by the violence of the current, and deposited at considerable altitudes. The floating of Alpine glaciers loaded with fragments of rock, would perhaps better remove the difficulty attending the explanation of these occurrences at the height of fifteen hundred feet and more above the valleys.